What is claimed is:

1. A low voltage micro switch comprising:

a substrate having an actuating space formed by etching at a certain area therein;

an actuating unit having a piezoelectric material extended in a cantilever beam shape from a portion of the substrate to the actuating space of the substrate and a bias electrode;

a conductive signal line extendedly formed at a certain interval from one side of the substrate and having a disconnected portion;

a supporting unit connected to the actuating unit, positioned in the actuating space, and moving according to actuation of the actuating unit;

a switching unit formed at the supporting unit and connecting or disconnecting the disconnected portion of the conductive signal line according to movement of the supporting unit; and

one or more ground units formed at the substrate.

2. The switch of claim 1, wherein the actuating space has a groove form with a certain depth in a portion of the substrate.

3. The switch of claim 1, wherein the actuating space is formed penetratingly in a portion of the substrate.

4. The switch of claim 1, wherein the switching unit is made of a conductor material.

5. The switch of claim 1, wherein the actuating unit includes four cantilever portions formed at certain intervals, and the supporting unit includes a plate portion forming the switching unit and four connection portions connecting the plate portion and four cantilever portions.

6. The switch of claim 1, wherein the actuating unit has one cantilever portion having a certain length, and the supporting unit includes a plate portion forming the switching unit and a connection portion connecting the plate portion and the cantilever portion.

7. The switch of claim 6, wherein there are two or three connection portions.

8. The switch of claim 1, wherein the actuating unit includes two cantilever portion formed at a certain interval, and the supporting unit includes a plate portion positioned between the two cantilever portions and forming the switching unit and a connection portion connecting the plate portion and the two cantilever portions.

9. The switch of claim 8, wherein there are two or more connection portions connecting the plate portion and the cantilever portions.

10. The switch of claim 1, wherein the actuating unit includes two cantilever portions formed at a certain interval, and the supporting unit includes a plate portion forming the switching unit and a connection portion connecting one

side of the plate portion and the cantilever portions.

11. A low voltage micro switch comprising:

a substrate having an actuating space formed by etching at a certain area therein;

an actuating unit having a piezoelectric material extended in a cantilever beam shape from a portion of the substrate to the actuating space of the substrate and a bias electrode;

a conductive signal line extendedly formed at a certain interval from one side of the substrate;

a supporting unit connected to the actuating unit, having a connection electrode connected to the substrate, and moving according to actuation of the actuating unit in the actuating space;

a capacitor unit formed on the connection electrode of the supporting unit and contacted to or separated from the conductive signal line according to movement of the supporting unit; and

one or more ground units formed at the substrate.

12. The switch of claim 11, wherein the actuating unit includes four cantilever portions formed at certain intervals, and the supporting unit includes a plate portion forming the capacitor unit and four connection portions connecting the plate portion and four cantilever portions.

13. The switch of claim 11, wherein the actuating unit has one cantilever portion having a certain length, and the supporting unit includes a plate

portion forming the capacitor unit and a connection portion connecting the plate portion and the cantilever portion.

14. The switch of claim 13, wherein there are two or three connection portions.

15. The switch of claim 11, wherein the actuating unit includes two cantilever portion formed at a certain interval, and the supporting unit includes a plate portion positioned between the two cantilever portions and forming the capacitor unit and a connection portion connecting the plate portion and the two cantilever portions.

16. The switch of claim 15, wherein there are two or more connection portions connecting the plate portion and the cantilever portions.

17. The switch of claim 11, wherein the actuating unit includes two cantilever portions formed at a certain interval, and the supporting unit includes a plate portion forming the capacitor unit and a connection portion connecting one side of the plate portion and the cantilever portions.

18. The switch of claim 11, wherein the capacitor unit comprises:

a first metallic layer formed at an upper portion of the connection electrode of the supporting unit;

a dielectric layer formed on the first metallic layer; and

a second metallic layer formed on the dielectric layer.

19. The switch of claim 18, wherein the supporting unit is formed as a high resistance silicon layer.